Water yield was raised as an issue during the appeal of the Medicine Bow National Forest Revised Forest Plan (Plan). During review of the water yield issue on the Plan, the Chief's office noted "that not all forest plan standards related to water and water rights are consistent with the direction provided in appeal decisions for other national forests in the Rocky Mountain Region." As a result, the Chief's Office directed the Regional Forester to "review all LRMP water resource management standards for consistency and compliance with prior Departmental and agency direction, and pertinent case law, and to make all necessary changes to management standards, as appropriate, through correction or amendment." (Chief's Appeal Decision, 2/16/06).

The purpose of this white paper is to review all Plan water resource management standards for consistency and compliance with prior Departmental and agency direction, and pertinent case law, and to make recommendations for necessary changes to management standards, as appropriate.

Many of the water resource management standards in the Plan came directly from the version of the Watershed Conservation Practices handbook (FSH 2509.25) and the Region Two Desk Guide that were in place when the Plan was being prepared. A revision to the Watershed Conservation Practices handbook was completed on May 5, 2006, after the Plan was completed and around the same time the Chief's Appeal Decision was made. The revision to the WCP handbook included extensive internal and external review and input. The direction found in the revised WCP handbook is believed to better achieve compliance with Section 505 of the Federal Land Policy and Management Act (FLPMA) and be consistent and comply with prior Departmental and agency direction, and pertinent case law.

After reviewing the revisions to the WCP handbook, it is my opinion that the changes made do not change the intent of the current standards in the Plan. Rather, incorporating the revised language from the WCP would reduce the potential for legal and public conflict; make the standards less ambiguous, more flexible and more achievable. Therefore, it is my recommendation that the wording of the following Plan standards be corrected as follows, which is consistent with the current version of the Watershed Conservation Practices Handbook and meets the intent of the Chief's direction:

2003 Medicine Bow Land and Resource Management Plan Chapter 1 – Forestwide Direction, Water and Aquatic, Pages 1-28 through 1-29:

Standard (3) 2003 LRMP: Manage land treatments to maintain enough organic ground cover in each land unit to prevent harmful increased runoff.

Standard (3) Corrected Language: Manage land treatments to maintain enough organic ground cover in each activity area to prevent harmful increased runoff.

- **Standard (4) 2003 LRMP:** In the water influence zone next to perennial and intermittent streams, lakes, and wetlands, allow only those actions that maintain or improve long-term stream health and riparian condition.
- **Standard (4) CORRECTED LANGUAGE:** In the water influence zone next to perennial and intermittent streams, lakes, and wetlands, allow only those actions that maintain or improve long-term stream health and riparian ecosystem condition.
- **Standard (5) 2003 LRMP:** Design and construct all stream crossings and other instream structures to allow passage of water and sediment, to withstand expected flood flows, and allow free movement of resident aquatic life.
- **Standard (5) CORRECTED LANGUAGE:** Design and construct all stream crossings and other instream structures to allow passage of flow and sediment, withstand expected flood flows, and allow free movement of resident aquatic life.
- **Standard (6) 2003 LRMP:** Conduct actions so that stream patterns, geometry, and habitats are maintained, or improved toward robust stream health.
- **Standard (6) CORRECTED LANGUAGE:** Conduct actions so that stream pattern, geometry, and habitats maintain or improve long-term stream health.
- **Standard** (7) **2003 LRMP:** Maintain long-term ground cover, soil structure, water budgets, and flow patterns in wetlands to sustain their ecological function, per 404 regulations.
- **Standard (7) CORRECTED LANGUAGE:** Maintain long-term ground cover, soil structure, water budgets, and flow patterns of wetlands to sustain their ecological function.
- **Standard (8) 2003 LRMP:** Return and/or maintain sufficient stream flows under appropriate authorities to minimize damage to scenic and aesthetic values, fish and wildlife habitat, and to otherwise protect the environment.
- **Standard (8) CORRECTED LANGUAGE:** Manage stream flows under appropriate authorities to minimize damage to scenic and aesthetic values, fish and wildlife habitat, and to otherwise protect the environment.
- **Standard (10) 2003 LRMP:** Place new sources of chemical and pathogenic pollutants where they will not reach surface and groundwater.
- **Standard (10) CORRECTED LANGUAGE:** Place new sources of chemical and pathogenic pollutants where such pollutants will not reach surface or groundwater.

Plan Water and Aquatic Standards 1, 2, 9, 11-15 have been reviewed and no changes to these standards are recommended to comply with the Chief's direction.

The Chief's direction indicated that the Plan did not include the following standard:

Cooperate with state, tribal and local governments, holders of water rights, and other interested parties to manage water resources to minimize damage to scenic and aesthetic values, fish and wildlife habitat, and to otherwise protect the environment. (Chief's direction)

It is my opinion that the recommended new language for Standard (8) above, along with the recommended wording of the following item in Plan Appendix B (National & Regional Policies), which is consistent with the current version of the Watershed Conservation Practices Handbook, meets the intent of the Chief's direction above:

Plan Appendix B Water – Water Quality 3. 2003 LRMP: Apply watershed conservation practices to sustain healthy soil, riparian, and aquatic systems. Adopt a stewardship ethic that treats land and resources as public assets for long-term benefits. Temper land and resource use to conserve limited resources for future generations. (FSH 2509.25-99-1, R2 Amendment)

Plan Appendix B Water – Water Quality 3. Corrected Language: Apply watershed conservation practices to sustain healthy soil, riparian, and aquatic systems. Adopt a stewardship ethic that treats land and resources as public assets for long-term benefits. Temper land and resource use to conserve limited resources for future generations. Cooperate with state, tribal and local governments, other federal agencies, holders of water rights and other interested parties to manage water resources. (FSH 2509.25-2006-1, R2 Amendment)

/s/ David J. Gloss 2/2/09

David J. Gloss Hydrologist

It is my decision to incorporate the corrected language from the WCP handbook to meet the intent of the 2006 Chief's Appeal Decision on the Medicine Bow National Forest Land and Resource Management Plan (LRMP) for the following: LRMP Forestwide Water and Aquatic Standards 3, 4, 5, 6, 7, 8, 10 and Plan Appendix B Water – Water Quality 3 as described above by Dave Gloss.

/s/ Mary H. Peterson 4/3/09

Mary H Peterson Forest Supervisor